

Notice of Allowability

Application No.

09/936,307

Examiner

Justin P Misleh

Applicant(s)

MIMURA ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed 7 December 2004.
2. ☒ The allowed claim(s) is/are Claims 4 – 7, 9, 17 – 21 (now renumbered 1 – 10, respectively).
3. ☒ The drawings filed on 07 December 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Authorization for this Examiner's amendment was given in a telephone interview with Alex Chan on 16 March 2005. The Application has been amended as shown below.

- o Please **REPLACE Claim 4** with:

“A television camera which adjusts levels of R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera comprising:

an iris section for performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an opening condition of the diaphragm;

a microcomputer for inputting the diaphragm signal from the iris section, and setting level adjusting values of the R, G, and B signals; and

white balance correcting means for adjusting levels of the R, G, and B signals according to the level adjusting values,

wherein said white balance correcting means has three analog multipliers for multiplying individually the R, G, and B signals before being white balance corrected with multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected,

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wherein said microcomputer stores the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a whole of diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the taking lens is not opened near to an opening end, said microcomputer outputs said stored multiplying coefficients to said analog multipliers,

wherein in a condition in which the diaphragm of the taking lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, and outputs said individually set multiplying coefficients to said analog multipliers,

wherein setting level adjusting values of the R, G, and B signals and level adjusting according to said setting are performed in response to a change in the diaphragm condition of said taking lens, and

wherein said at least one arbitrary signal is the signal G.”

- Please **REPLACE Claim 5** with:

“A television camera which adjusts levels of R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera comprising:

an iris section for performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an opening condition of the diaphragm;

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a microcomputer for inputting the diaphragm signal from the iris section, and setting level adjusting values of the R, G, and B signals; and

white balance correcting means for adjusting levels of the R, G, and B signals according to the level adjusting values,

wherein said white balance correcting means has three analog multipliers for multiplying individually the R, G, and B signals before being white balance corrected with multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected,

wherein said microcomputer stores the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a whole of diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the taking lens is not opened near to an opening end, said microcomputer outputs said stored multiplying coefficients to said analog multipliers,

wherein in a condition in which the diaphragm of the taking lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, and outputs said individually set multiplying coefficients to said analog multipliers,

wherein setting level adjusting values of the R, G, and B signals and level adjusting according to said setting are performed in response to a change in the diaphragm condition of said taking lens, and

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wherein said at least one arbitrary signal is the signal R.”

- o Please **REPLACE Claim 6** with:

“A television camera which adjusts levels of R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera comprising:

an iris section for performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an opening condition of the diaphragm;

a microcomputer for inputting the diaphragm signal from the iris section, and setting level adjusting values of the R, G, and B signals; and

white balance correcting means for adjusting levels of the R, G, and B signals according to the level adjusting values,

wherein said white balance correcting means has three analog multipliers for multiplying individually the R, G, and B signals before being white balance corrected with multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected,

wherein said microcomputer stores the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a whole of diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the taking lens is not opened near to an opening end, said microcomputer outputs said stored multiplying coefficients to said analog multipliers,

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wherein in a condition in which the diaphragm of the taking lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, and outputs said individually set multiplying coefficients to said analog multipliers,

wherein setting level adjusting values of the R, G, and B signals and level adjusting according to said setting are performed in response to a change in the diaphragm condition of said taking lens, and

wherein said at least one arbitrary signal is the signal B.”

- o Please **REPLACE Claim 7** with:

“A television camera which adjusts levels of R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera comprising:

an iris section for performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an opening condition of the diaphragm;

a microcomputer for inputting the diaphragm signal from the iris section, and setting level adjusting values of the R, G, and B signals; and

white balance correcting means for adjusting levels of the R, G, and B signals according to the level adjusting values,

wherein said white balance correcting means has three analog multipliers for multiplying individually the R, G, and B signals before being white balance corrected with multiplying

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coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected,

wherein said microcomputer stores the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a whole of diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the taking lens is not opened near to an opening end, said microcomputer outputs said stored multiplying coefficients to said analog multipliers,

wherein in a condition in which the diaphragm of the taking lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, and outputs said individually set multiplying coefficients to said analog multipliers,

wherein setting level adjusting values of the R, G, and B signals and level adjusting according to said setting are performed in response to a change in the diaphragm condition of said taking lens.”

- Please **REPLACE Claim 9** with:

“A television camera which adjusts levels of R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera comprising:

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an iris section for performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an opening condition of the diaphragm;

a microcomputer for inputting the diaphragm signal from the iris section, and setting level adjusting values of the R, G, and B signals; and

white balance correcting means for adjusting levels of the R, G, and B signals according to the level adjusting values,

wherein said white balance correcting means has three analog multipliers for multiplying individually the R, G, and B signals before being white balance corrected with multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected,

wherein said microcomputer stores the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a whole of diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the taking lens is not opened near to an opening end, said microcomputer outputs said stored multiplying coefficients to said analog multipliers,

wherein in a condition in which the diaphragm of the taking lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, and outputs said individually set multiplying coefficients to said analog multipliers.”

- Please **REPLACE Claim 17** with:

“A television camera white balance correcting method for adjusting levels of R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera white balance correcting method comprising the steps of:

- a) performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an opening condition of the diaphragm;
- b) inputting the diaphragm signal from the step a) into a microcomputer, said microcomputer operative to set level adjusting values of the R, G, and B signals;
- c) adjusting the levels of the R, G, and B signals according to the level adjusting values;
- d) multiplying individually the R, G, and B signals before being white balance corrected with multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected; and
- e) storing the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a whole of diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the lens is not opened near to an opening end, said microcomputer outputs said stored multiplying coefficients, and

wherein in a condition in which the diaphragm of the lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals.”

- o Please **REPLACE Claim 18** with:

“A television camera white balance correcting method for adjusting levels of R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera white balance correcting method comprising the steps of:

- a) performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an opening condition of the diaphragm;
- b) inputting the diaphragm signal from the step a) into a microcomputer, said microcomputer operative to set level adjusting values of the R, G, and B signals;
- c) adjusting the levels of the R, G, and B signals according to the level adjusting values;
- d) multiplying individually the R, G, and B signals before being white balance corrected with multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected; and
- e) storing the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a whole of diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the lens is not opened near to an opening end, said microcomputer outputs said stored multiplying coefficients, and

wherein in a condition in which the diaphragm of the lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals,

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wherein setting level adjusting values of the R, G, and B signals and level adjusting according to said setting are performed in response to a change in the diaphragm condition of said taking lens, and

wherein said at least one arbitrary signal is the signal G.”

o Please **REPLACE Claim 19** with:

“A television camera white balance correcting method for adjusting levels of R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera white balance correcting method comprising the steps of:

- a) performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an opening condition of the diaphragm;
- b) inputting the diaphragm signal from the step a) into a microcomputer, said microcomputer operative to set level adjusting values of the R, G, and B signals;
- c) adjusting the levels of the R, G, and B signals according to the level adjusting values;
- d) multiplying individually the R, G, and B signals before being white balance corrected with multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected; and
- e) storing the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a whole of diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the lens is not opened near to an opening end, said microcomputer outputs said stored multiplying coefficients, and

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wherein in a condition in which the diaphragm of the lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals,

wherein setting level adjusting values of the R, G, and B signals and level adjusting according to said setting are performed in response to a change in the diaphragm condition of said taking lens, and

wherein said at least one arbitrary signal is the signal R.”

- Please **REPLACE Claim 20** with:

“A television camera white balance correcting method for adjusting levels of R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera white balance correcting method comprising the steps of:

- a) performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an opening condition of the diaphragm;
- b) inputting the diaphragm signal from the step a) into a microcomputer, said microcomputer operative to set level adjusting values of the R, G, and B signals;
- c) adjusting the levels of the R, G, and B signals according to the level adjusting values;
- d) multiplying individually the R, G, and B signals before being white balance corrected with multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected; and

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e) storing the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a whole of diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the lens is not opened near to an opening end, said microcomputer outputs said stored multiplying coefficients, and

wherein in a condition in which the diaphragm of the lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals,

wherein setting level adjusting values of the R, G, and B signals and level adjusting according to said setting are performed in response to a change in the diaphragm condition of said taking lens, and

wherein said at least one arbitrary signal is the signal B.”

○ Please **REPLACE Claim 21** with:

“A television camera white balance correcting method for adjusting levels of R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera white balance correcting method comprising the steps of:

a) performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an opening condition of the diaphragm;

b) inputting the diaphragm signal from the step a) into a microcomputer, said microcomputer operative to set level adjusting values of the R, G, and B signals;

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c) adjusting the levels of the R, G, and B signals according to the level adjusting values;

d) multiplying individually the R, G, and B signals before being white balance corrected with multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected; and

e) storing the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a whole of diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the lens is not opened near to an opening end, said microcomputer outputs said stored multiplying coefficients, and

wherein in a condition in which the diaphragm of the lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals,

wherein setting level adjusting values of the R, G, and B signals and level adjusting according to said setting are performed in response to a change in the diaphragm condition of said taking lens.”

Allowable Subject Matter

2. **Claims 4 – 7, 9, 17 – 21** (now renumbered 1 – 10, respectively), as amended above, are allowed.
3. The following is an Examiner’s statement of reasons for allowance:

While the closest prior art teaches that when a diaphragm is in a near fully open condition, a diaphragm opening value is used to individually and respectively adjust optically color separated image signals so as to correctly balance the respective color separated image signal to the remaining color separated image signals and hence performing a white balance correction based upon diaphragm opening values, albeit, only when the diaphragm has exceeded a predetermined opening value. Furthermore, the closest prior art also teaches a white balance correcting method that when brightness in an image exceeds a predetermined value, predetermined fixed adjusting values are used for white balancing and when brightness in an image does not exceed a predetermined value, newly set adjusting values are used for white balancing.

However, the closest prior art does not teach or fairly suggest wherein a microcomputer, for setting the adjusting values, previously stores and applies, individually and respectively, white balance adjusting values to the color separated image signals when the diaphragm is in a condition when it is not opened near to the opening end and wherein the microcomputer newly stores and applies, according to the diaphragm opening values, individually and respectively, white balance adjusting values to the color separated image signals.

4. Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

5. In view of Applicant's remarks, filed 7 December 2004, and amendment to Figure 1, all objections to the specification and the drawings are hereby withdrawn. The Examiner approves Applicant's amendment to Figure 1.

6. Upon Applicant's request, the Examiner has provided, in the attached Appendix, a set of marked-up claims reflecting the changes made to the claim language via the Examiner's Amendment.


Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 5:00 PM and on alternating Fridays from 8:00 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
March 17, 2005


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2500

APPENDIX

4. A television camera which adjusts the levels of the R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera comprising:

an iris section for performing an the opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an the opening condition of the diaphragm;

a microcomputer for inputting the diaphragm signal from the iris section, and setting level adjusting values of the R, G, and B signals; and

white balance correcting means for adjusting the levels of the R, G, and B signals according to the level adjusting values,

wherein said white balance correcting means has ~~have~~ three analog multipliers for multiplying individually the R, G, and B signals before being white balance corrected with and multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected,

wherein said microcomputer stores the multiplying coefficients ~~supplied to said white balance correcting means~~ as said level adjusting values by bringing the multiplying coefficients into correspondence with a the whole of the diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the taking lens is not opened near to an the opening end, said microcomputer outputs said stored multiplying coefficients ~~stored~~ to said analog multipliers,

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wherein in a condition in which the diaphragm of the taking lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, and outputs said individually set multiplying coefficients ~~them~~ to said analog multipliers,

wherein setting level adjusting values of the R, G, and B signals ~~of the level adjusting value~~ and level adjusting according to said setting the level adjusting value are performed in response to a change in the diaphragm condition of said taking lens, and

wherein said at least one arbitrary signal is the signal G.

5. A television camera which adjusts the levels of the R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera comprising:

an iris section for performing an the opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an the opening condition of the diaphragm;

a microcomputer for inputting the diaphragm signal from the iris section, and setting level adjusting values of the R, G, and B signals; and

white balance correcting means for adjusting the levels of the R, G, and B signals according to the level adjusting values,

wherein said white balance correcting means has ~~have~~ three analog multipliers for multiplying individually the R, G, and B signals before being white balance corrected with ~~and~~

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multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected,

wherein said microcomputer stores the multiplying coefficients ~~supplied to said white balance correcting means~~ as said level adjusting values by bringing the multiplying coefficients into correspondence with a ~~the~~ whole of ~~the~~ diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the taking lens is not opened near to an the opening end, said microcomputer outputs said stored multiplying coefficients ~~stored~~ to said analog multipliers,

wherein in a condition in which the diaphragm of the taking lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, and outputs said individually set multiplying coefficients ~~them~~ to said analog multipliers,

wherein setting level adjusting values of the R, G, and B signals ~~of the level adjusting value~~ and level adjusting according to said setting the level adjusting value are performed in response to a change in the diaphragm condition of said taking lens, and

wherein said at least one arbitrary signal is the signal R.

6. A television camera which adjusts the levels of the R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera comprising:

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an iris section for performing an ~~the~~ opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an ~~the~~ opening condition of the diaphragm;

a microcomputer for inputting the diaphragm signal from the iris section, and setting level adjusting values of the R, G, and B signals; and

white balance correcting means for adjusting ~~the~~ levels of the R, G, and B signals according to the level adjusting values,

wherein said white balance correcting means has ~~have~~ three analog multipliers for multiplying individually the R, G, and B signals before being white balance corrected with ~~and~~ multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected,

wherein said microcomputer stores the multiplying coefficients ~~supplied to said white balance correcting means~~ as said level adjusting values by bringing the multiplying coefficients into correspondence with a ~~the~~ whole of the diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the taking lens is not opened near to an ~~the~~ opening end, said microcomputer outputs said stored multiplying coefficients ~~stored~~ to said analog multipliers,

wherein in a condition in which the diaphragm of the taking lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, and outputs said individually set multiplying coefficients ~~them~~ to said analog multipliers,

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wherein setting level adjusting values of the R, G, and B signals ~~of the level adjusting value~~ and level adjusting according to said setting the level adjusting value are performed in response to a change in the diaphragm condition of said taking lens, and

wherein said at least one arbitrary signal is the signal B.

7. A television camera which adjusts ~~the levels of the~~ R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera comprising:

an iris section for performing an ~~the~~ opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an ~~the~~ opening condition of the diaphragm;

a microcomputer for inputting the diaphragm signal from the iris section, and setting level adjusting values of the R, G, and B signals; and

white balance correcting means for adjusting ~~the levels of the~~ R, G, and B signals according to the level adjusting values,

wherein said white balance correcting means has ~~have~~ three analog multipliers for multiplying individually the R, G, and B signals before being white balance corrected with ~~and~~ multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected,

wherein said microcomputer stores the multiplying coefficients ~~supplied to said white balance correcting means~~ as said level adjusting values by bringing the multiplying coefficients into correspondence with a ~~the~~ whole of ~~the~~ diaphragm regions of the taking lens,

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wherein in a condition in which the diaphragm of the taking lens is not opened near to an the opening end, said microcomputer outputs said stored multiplying coefficients ~~stored~~ to said analog multipliers,

wherein in a condition in which the diaphragm of the taking lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, and outputs said individually set multiplying coefficients ~~them~~ to said analog multipliers,

wherein setting level adjusting values of the R, G, and B signals ~~of the level adjusting value~~ and level adjusting according to said setting the level adjusting value are performed in response to a change in the diaphragm condition of said taking lens.

9. A television camera which adjusts the levels of the R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera comprising:

an iris section for performing an ~~the~~ opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an ~~the~~ opening condition of the diaphragm;

a microcomputer for inputting the diaphragm signal from the iris section, and setting level adjusting values of the R, G, and B signals; and

white balance correcting means for adjusting the levels of the R, G, and B signals according to the level adjusting values,

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wherein said white balance correcting means has ~~have~~ three analog multipliers for multiplying individually the R, G, and B signals before being white balance corrected with ~~and~~ multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected,

wherein said microcomputer stores the multiplying coefficients ~~supplied to said white balance correcting means~~ as said level adjusting values by bringing the multiplying coefficients into correspondence with a ~~the~~ whole of ~~the~~ diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the taking lens is not opened near to an ~~the~~ opening end, said microcomputer outputs said stored multiplying coefficients ~~stored~~ to said analog multipliers,

wherein in a condition in which the diaphragm of the taking lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, and outputs said individually set multiplying coefficients ~~them~~ to said analog multipliers.

17. A television camera white balance correcting method for adjusting ~~the~~ levels of ~~the~~ R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera white balance correcting method comprising the steps of:

a) performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an ~~the~~ opening condition of the diaphragm;

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b) inputting the diaphragm signal from the step a) into a microcomputer, said microcomputer operative to set level adjusting values of the R, G, and B signals;

c) adjusting the levels of the R, G, and B signals according to the level adjusting values;

d) multiplying individually the R, G, and B signals before being white balance corrected with ~~and~~ multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected; and

e) storing the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a ~~the~~ whole of the diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the lens is not opened near to an ~~the~~ opening end, said microcomputer outputs said stored multiplying coefficients, and

wherein in a condition in which the diaphragm of the lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals.

18. A television camera white balance correcting method for adjusting the levels of the R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera white balance correcting method comprising the steps of:

a) performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an ~~the~~ opening condition of the diaphragm;

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b) inputting the diaphragm signal from the step a) into a microcomputer, said microcomputer operative to set level adjusting values of the R, G, and B signals;

c) adjusting the levels of the R, G, and B signals according to the level adjusting values;

d) multiplying individually the R, G, and B signals before being white balance corrected with and multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected; and

e) storing the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a the whole of the diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the lens is not opened near to an the opening end, said microcomputer outputs said stored multiplying coefficients, and

wherein in a condition in which the diaphragm of the lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, wherein setting level adjusting values of the R, G, and B signals ~~of the level adjusting value~~ and level adjusting according to said setting the level adjusting value are performed in response to a change in the diaphragm condition of said taking lens, and

wherein said at least one arbitrary signal is the signal G.

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19. A television camera white balance correcting method for adjusting the levels of the R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera white balance correcting method comprising the steps of:

a) performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an the opening condition of the diaphragm;

b) inputting the diaphragm signal from the step a) into a microcomputer, said microcomputer operative to set level adjusting values of the R, G, and B signals;

c) adjusting the levels of the R, G, and B signals according to the level adjusting values;

d) multiplying individually the R, G, and B signals before being white balance corrected with ~~and~~ multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected; and

e) storing the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a ~~the~~ whole of the diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the lens is not opened near to an the opening end, said microcomputer outputs said stored multiplying coefficients, and

wherein in a condition in which the diaphragm of the lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, wherein setting level adjusting values of the R, G, and B signals ~~of the level adjusting value~~ and level adjusting according to said setting the

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~~level adjusting value~~ are performed in response to a change in the diaphragm condition of said taking lens, and

wherein said at least one arbitrary signal is the signal R.

20. A television camera white balance correcting method for adjusting the levels of the R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera white balance correcting method comprising the steps of:

a) performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an the opening condition of the diaphragm;

b) inputting the diaphragm signal from the step a) into a microcomputer, said microcomputer operative to set level adjusting values of the R, G, and B signals;

c) adjusting the levels of the R, G, and B signals according to the level adjusting values;

d) multiplying individually the R, G, and B signals before being white balance corrected with and multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected; and

e) storing the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a the whole of the diaphragm regions of the taking lens,

wherein in a condition in which the diaphragm of the lens is not opened near to an the opening end, said microcomputer outputs said stored multiplying coefficients, and

wherein in a condition in which the diaphragm of the lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a

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level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, wherein setting level adjusting values of the R, G, and B signals ~~of the level adjusting value~~ and level adjusting according to said setting the level adjusting value are performed in response to a change in the diaphragm condition of said taking lens, and

wherein said at least one arbitrary signal is the signal B.

21. A television camera white balance correcting method for adjusting the levels of the R, G, and B signals obtained through a three-color separation optical system to maintain white balance, said television camera white balance correcting method comprising the steps of:

a) performing an opening/closing operation of a diaphragm of a taking lens, and outputting a diaphragm signal indicating an ~~the~~ opening condition of the diaphragm;

b) inputting the diaphragm signal from the step a) into a microcomputer, said microcomputer operative to set level adjusting values of the R, G, and B signals;

c) adjusting the levels of the R, G, and B signals according to the level adjusting values;

d) multiplying individually the R, G, and B signals before being white balance corrected with ~~and~~ multiplying coefficients thereto, and outputting individually the individually multiplied values as the R, G, and B signals after being white balance corrected; and

e) storing the multiplying coefficients as said level adjusting values by bringing the multiplying coefficients into correspondence with a ~~the~~ whole of the diaphragm regions of the taking lens,

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wherein in a condition in which the diaphragm of the lens is not opened near to an the opening end, said microcomputer outputs said stored multiplying coefficients, and

wherein in a condition in which the diaphragm of the lens is opened near to the opening end, said microcomputer sets individually said multiplying coefficients in such a manner that a level of at least one arbitrary signal of the R, G, and B signals is made substantially even to that of at least one of other R, G, and B signals, wherein setting level adjusting values of the R, G, and B signals ~~of the level adjusting value~~ and level adjusting according to said setting the level adjusting value are performed in response to a change in the diaphragm condition of said taking lens.